

CREW HEALTH ADVICE

Spotlight on ‘the Kidneys’

On 9 March, we are celebrating World Kidney Day, an awareness day created to remind us all about the importance of the kidneys as part of our overall health. It is quite common for the Club claims teams to see cases of kidney issues in crew onboard, some of which are serious enough to merit debarkation and even surgery for treatment.

In one recent case, despite the best efforts of physicians, a crew member was diagnosed with kidney stones that could not be removed. The crew member was provided pain relief and repatriated for follow up treatment. The case, which evolved over a few months, reached costs of USD 35,000 and resulted in some disruption to the ship’s schedule.

Therefore, with the potential risks involved, we thought we would take a closer look at the kidneys and chatted with Crew Health partner Rachel Smith of Red Square Medical.

The Kidneys...what are they?

The kidneys are the body’s filtration units. Each one is about the size of your fist and they are roughly bean shaped. Their main job is to filter the blood to remove waste products (including drugs and toxins) and extract excess fluid. This combination of fluid and waste products becomes urine and it passes down the ureters, into the bladder, and then is excreted from the body via the urethra.

Your blood passes through your kidneys an astonishing 40 times a day and anything to do with the kidneys is termed ‘renal’. As well as their vital role in filtering waste, the kidneys balance the salt, minerals and fluid in your body, regulate blood pressure, and produce certain hormones. There are 140 miles of tubes and a million filters in your kidneys making all this happen!

Where are your kidneys?

You normally have two kidneys and they are found to the rear of the abdominal cavity, one on the left and one on the right hand side.

What are the most common kidney issues?

Kidney stones, infections/inflammation, cysts, kidney disease and kidney failure are all illnesses we have seen onboard vessels. We will look at these in more detail below to help you identify any potential issues.

Kidney Stones

Kidney stones are formed from little crystals of waste products in the blood, and can affect one or both kidneys. Often, they are so tiny that you have no symptoms and pee them out without noticing. Sometimes though, the crystals that form kidney stones can build up, and form larger lumps, which will not pass through so easily.

The main reason that seafarers (and the rest of the population!) develop kidney stones is because they are not drinking enough fluid. This could be driven by simply working long hours and being too busy, but also the distance to a toilet, the amount of PPE/clothing that has to be removed and not keeping (or being able to keep) a bottle of water to hand.

Consequently, if you are working in hot, humid environments, you do need to think about your hydration and take steps to help yourself.

Medications and undiagnosed medical conditions can also contribute to the formation of kidney stones. So next time you have your pre-sea medical, ask your Doctor to check through your medications and find out whether they could increase

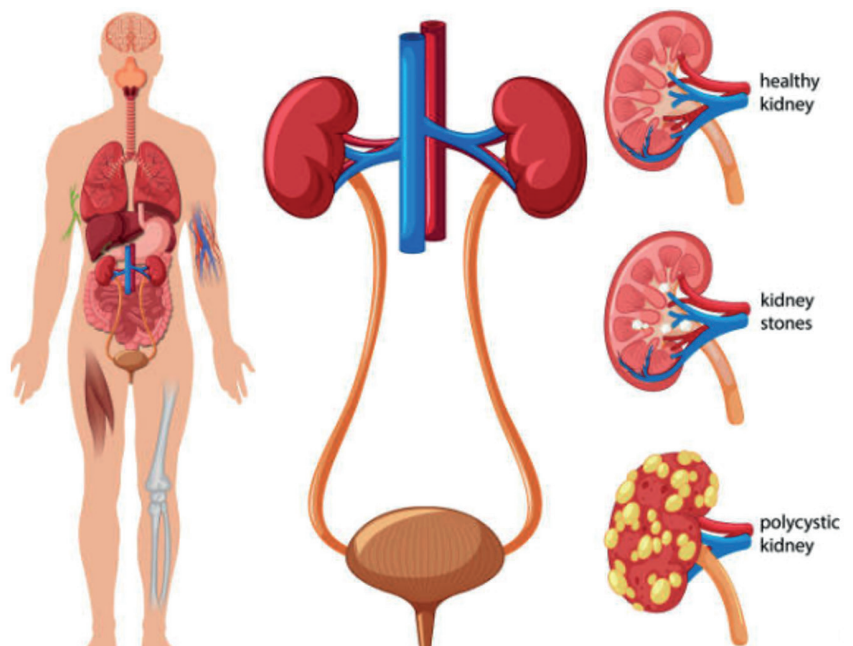


Image: Human kidney health conditions

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your risk of kidney stones. Then you can take steps to manage it onboard.

Always report your symptoms, no matter how minor they seem to be. It's better to get checked out early than wait for it to get worse, because when kidney stones are bad they are excruciating and will usually end up in you having to be medically evacuated from the vessel.

How do I know if I have Kidney Stones?

You will not notice the very tiny ones, but once the crystals start building up and forming larger lumps there are some definite signs and symptoms to look out for:

- Pain that may start around the back, where your kidneys are located, that moves around the side and down towards your groin area. This could be on one or both sides.
- Pain that is severe, that comes and goes and feels spasmodic.
- Blood in your urine.
- The feeling of needing to pass urine often, but when you do it is painful and only small amounts of urine are passed.
- Nausea and possibly vomiting.
- An elevated temperature.

If you think you have kidney stones, report to the person onboard who is in charge of medical care and tell them about your symptoms. Remember to keep drinking plenty of water.

Kidney disease

Chronic kidney disease (CKD) is a long-term issue where the kidneys just do not work as well as they should. It is generally associated with ageing but it can affect anyone, and it is more commonly found in people who are black or of South Asian origin.

CKD is normally caused by a combination of other conditions that put strain on the kidneys, such as high blood pressure, diabetes, high cholesterol, kidney infections, kidney inflammation and polycystic kidney disease. Other causes

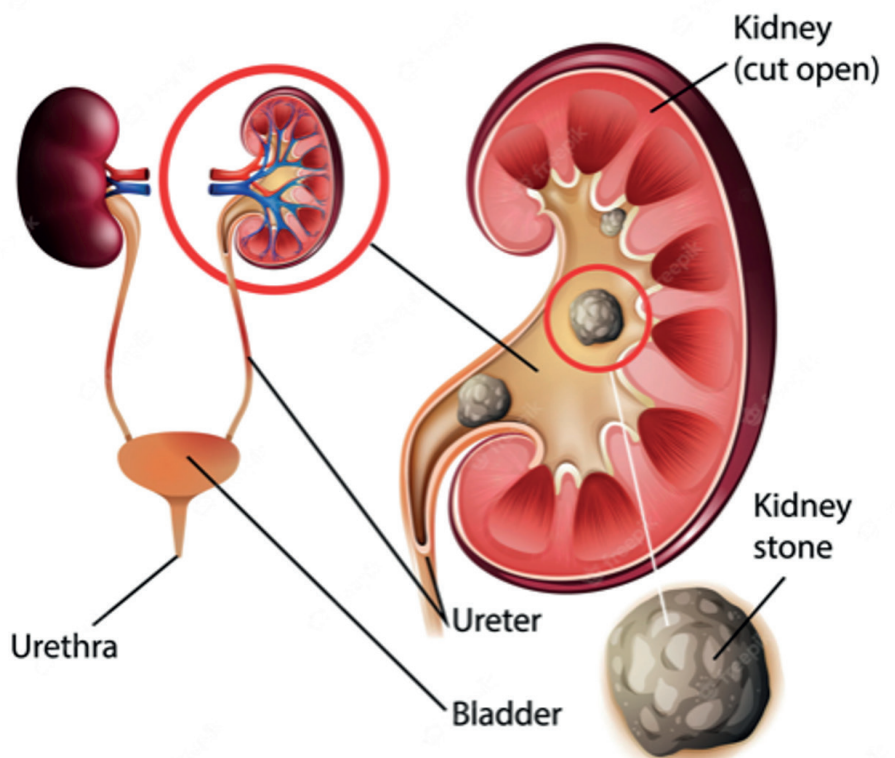


Image: Kidney stones

include blockages in the flow of urine (recurring kidney stones, enlarged prostate), or regular use of some medications.

CKD worsens over time and while most people live with it for a long time, for 1 in 50 people it can eventually lead to kidney failure, where the kidneys stop working altogether. It does however put you into a higher risk category for conditions such as cardiovascular disease, particularly heart attacks and strokes.

There are not normally any symptoms of kidney disease in the early stages and it is often only discovered through blood or urine tests for something else. In more advanced stages, symptoms can include tiredness, swollen ankles, feet or hands, shortness of breath, nausea and blood in your urine.

Blood and urine tests will diagnose kidney disease, which is measured in stages, with CKD stage 1 being the least serious.

While there is no cure for CKD, there is a lot that can be done to relieve symptoms and prevent it from worsening. Regular monitoring helps too.

- Lifestyle changes to remain as healthy as possible and control and/or improve the contributory causes.
- Medication – especially to control high cholesterol and high blood pressure.
- In worst case scenarios, dialysis may be required, and transplants considered.

Kidney Infections

Kidney infections are normally caused by bacteria from a urinary tract infection that travels from the bladder up to one or both kidneys. Symptoms include feeling sick, feverish, shivery and you can experience pain in your back, sides, or abdomen. Often, you will have symptoms of a UTI as well. I.e. needing to pass urine suddenly or more frequently, pain or a burning sensation on peeing, dark, cloudy and strong smelling urine, blood in your urine.

Kidney infections are easily treated with antibiotics but if left untreated, can cause permanent kidney damage so if you suspect a UTI or kidney infection, seek advice straight away.

The risk of kidney infections can be reduced by keeping your bladder and

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urethra free of bacteria – by drinking plenty of fluids (water is the best), going to the toilet when you need to – rather than holding it in. Going to the toilet after sex, wiping from front to back, washing your genitals daily and before having sex, treating constipation promptly, and not using spermicide as part of birth control measures.

Inflammation of the Kidneys – Glomerulonephritis

Glomerulonephritis can be caused by vasculitis, infection, or your immune system attacking healthy tissues (e.g. lupus) and damaging the glomeruli, the tiny filters, inside your kidneys. There are not usually any noticeable symptoms and diagnosis is normally when tests are carried out for other reasons. Mild cases can be treated effectively, but for a few people, it may lead to longer term kidney problems.

Severe cases mean you might see blood in your urine, and of course any blood in your urine needs further investigation. If the urine contains a lot of protein, it can be frothy and if the protein leaks into your urine, it can cause swelling to the legs and other parts of the body (nephrotic syndrome). Other symptoms can include rashes, joint pain, breathing problems and tiredness.

Treatments are available and can be as simple as reducing the salt in your diet to put less strain on your kidneys. Depending on the cause, a variety of medications may be suitable and lifestyle changes can help with other contributory factors and complications of glomerulonephritis.

Kidney Cysts

There is a condition called autosomal dominant polycystic kidney disease (ADPKD) which is present from birth but may not cause any issues until you are between 30–60 years of age, which makes it quite relevant to seafarers.

Fluid filled sacs (cysts) grow in the kidneys and can affect kidney function, leading to the kidneys of older affected adults being 3 to 4 times larger than normal. They can cause pain, blood in your urine, high blood pressure, kidney stones, recurrent UTIs and can lead to CKD.

Pain is often the first symptom and can be severe, sometimes only lasting a few minutes and at most a few days. It is often a sign of a cyst becoming larger, bleeding, a kidney stone or an infection.

If you experience any of these symptoms it is wise to seek advice sooner rather than later. Even if it is a simple UTI, you might need some treatment and recurrent issues would need further investigation.

During your PEME examination, your urine will be tested in order to assess kidney function amongst other things. Certain kidney issues may result in a seafarer being deemed fit for sea service but with restrictions, or in the worst case scenario, permanently unfit for sea service. This might sound a bit daunting, but it really demonstrates just how important it is to look after our kidneys, and manage the lifestyle factors that contribute to the multiple causes of kidney disease.

References

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This advice was compiled in collaboration with Red Square Medical, who offer a full range of maritime medical services, from training and consultancy services, right through to mass casualty incident planning and training.

www.redsquaremedical.com

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The Club was the first to launch a crew health scheme in 1996 due to increasing crew illness claims and a lack of accountability of clinics. Since 1996, the Crew Health programme has become one of the Club's leading loss prevention initiatives. The aim of the programme is to reduce the volume and value of crew illness claims which are caused by a pre-existing illnesses or disease. These underlying conditions often impact on the crew member's fitness for service and can endanger not only the health of the seafarer but also the onboard safety of other crew.

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Sophia joined Thomas Miller in 1992 and from 1994 worked as a claims handler dealing mainly with French and Spanish Members. In 2004, Sophia became the Crew Health Programme Director. Sophia has undertaken a large number of clinic audits, implemented the standard medical

form and clinic guidelines. She has also lead the scheme through the largest period of growth and development with a doubling of approved clinic facilities and a four fold member increase. Sophia is a Director of Thomas Miller & Co. Ltd.

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Saidul Alom joined Crew Health from the European Region Service Team in 2004. Saidul provides administrative support to the Crew Health programme and is responsible for liaison with the approved clinics on financial billing matters and ensuring prompt payment of all clinic fees.

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Stuart joined Thomas Miller in 1998 as a claims trainee for UK P&I Club's Greek Members. In April 2005 Stuart joined Crew Health as the Team Administrator. Stuart is responsible for co-ordination of Member entries and administration for the clinic approval process.